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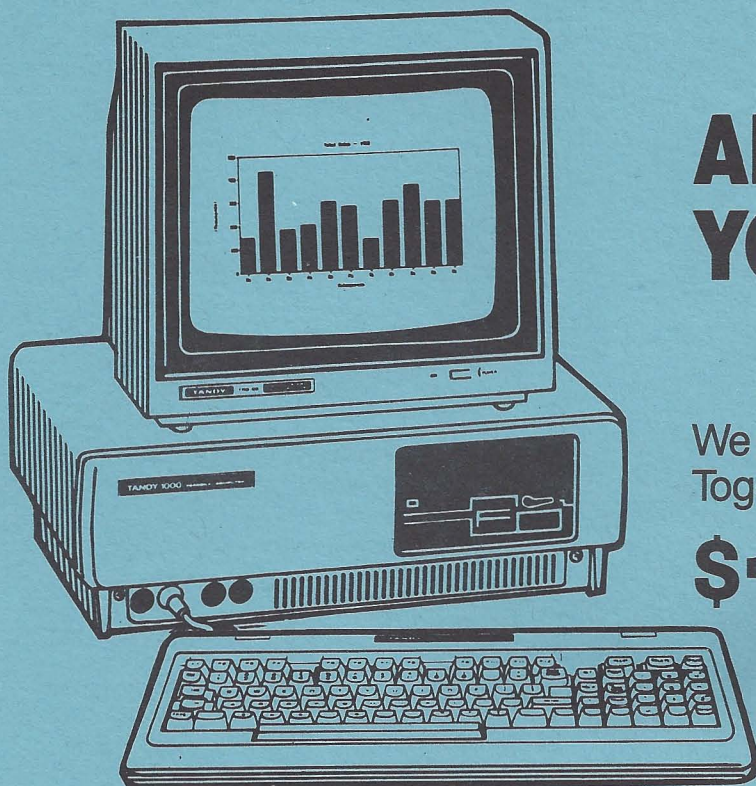
ENERGY = MC^2 ...THE MICHIGAN COMPUTER CONSORTIUM MAGAZINE

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MARCH 1985



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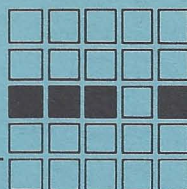
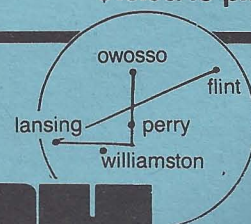
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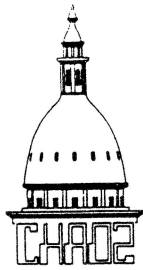
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DD/DD (Double Sided-Double Density)	\$19.00/10 pk.



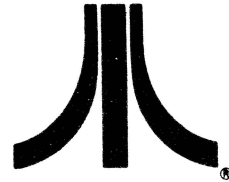
PERRY COMPUTERS

CHAOS



C.H.A.O.S. WELCOMES YOU
TO THE WORLD OF THE

ATARI



CHAOS is not affiliated with Atari

CAPITOL HILL ATARI OWNERS' SOCIETY

C.H.A.O.S IS:

C.H.A.O.S is the Capitol Hill Atari Owners Society. CHAOS meets every third Saturday in the Foster Community Center (200 N. Foster). The meetings run from 9am-12 noon. The presentations at meetings include new hardware and software and news. Business is limited at general meetings to make the meetings more enjoyable.

C.H.A.O.S MEETINGS ARE:

FUN, EXCITING, INFORMATIVE, AND CHAOTIC

You will have to see a CHAOS meeting to believe it. The discussions are lively, with lots of news and information. The presentations are of general interest. The speakers arrange their presentations to be understood by the beginners in the group as well as the experts.

The presentations at any meeting may include wordprocessors, games, databases, educational applications, utilities, hardware, and hardware modifications and enhancements.

There are experts and beginners in CHAOS and there are Special Interest Groups periodically when interests arise.

C.H.A.O.S. IS YOUR BEST COMPUTER PERIPHERAL

In addition to receiving a monthly newsletter that will keep you informed of local, national, and international events in computers, you will have access to the largest Atari public domain library of programs in the world.

C.H.A.O.S. HAS OVER 600 PROGRAMS IN ITS LIBRARY.

The CHAOS library is growing every day. This can save you a great deal of time and money. Programs that you write can be added to the CHAOS library. If you would like a listing of the programs in our current library, please send a large self-addressed, stamped envelope. Include an extra 50 cents if you are not a CHAOS member to cover printing costs. Mail your request to CHAOS, PO Box 16132, Lansing, Mich 48901.

C.H.A.O.S. RUNS A BULLETIN BOARD SYSTEM

CHAOS runs a Bulletin Board System that you can dial into if you own a modem. The telephone number for the BBS is 517-627-4243. CHAOS's BBS is one of the most sophisticated systems in existence. It provides a means of leaving messages for other computer owners and a means of obtaining FREE software. Join CHAOS now and get your password right away.

CHAOS's Officers and Leaders

<u>Position</u>	<u>Name</u>	<u>Phone#</u>
President:	Leo Sell	393-7792
Vice president:	Lance Ward	393-1357
Treasurer:	Rob Peck	887-0327
Newsletter Editor:	Mike Aldrich	394-2412
Program Librarian:	Guy Hurt	484-7675
Pub. Librarian:	Mike Aldrich	394-2412
Rec. Secretary:	Sandy Theisen	882-0124
Cor. Secretary:	Dick Peterson	485-7727
Program Coordinator:	Diane Genshaw	355-8229
BBS Sysops:	Barry Schroeder	627-6708
" "	Mike Clewley	627-7807
BBS Librarian	John Nagy	487-5646

C.H.A.O.S. NEWSLETTER EXCHANGE

If your Atari users group would like to exchange newsletters with CHAOS PLEASE send your newsletter to the following address:

C.H.A.O.S.

ATTENTION: NEWSLETTER EXCHANGE

P.O. BOX 16132

LANSING, MICHIGAN 48901

Please update you current list of CHAOS addresses, officers, and BBS number with the previous information.

C.H.A.O.S. PUBLICATIONS LIBRARY

CHAOS has many books and other publications about the Atari computers that can be checked out by members. Each month CHAOS receives newsletters from other Atari clubs from around the world.

HOW TO JOIN C.H.A.O.S.

If you would like to join CHAOS then fill out a membership form or send your Name, address and any other information about yourself you would like and \$12.00 (Yearly membership fee) to:

CHAOS

ATTN: MEMBERSHIP

P.O. BOX 16132

LANSING, MICHIGAN 48901

CHAOS

PRESIDENT'S CORNER by Leo Sell

Looks like we are looking at a Fall date for the Computer Faire. We will need a coordinator and plenty of help. VOLUNTEERS??????

If we get started now it shouldn't be too much to handle at one time. I should warn all of you, the Commodore Club is really gunning for us this year. We will be better than ever though won't we!!

We will have elections at this meeting. As of this writing we have a tentative slate as follows:

PRESIDENT.....Leo Sell

VICE PRESIDENT.....Lance Ward

TREASURER.....Sandy Theisen

CORRESPONDING SECRETARY...Dick Peterson

RECORDING SECRETARY.....No Name

Nominations will be accepted from the membership present for each of the proposed positions. The voting will proceed in the sequence of positions as listed above. Families have only one vote.

Beginning in April we have a new meeting place for 5 months. Our spring/summer meeting hours will be 10:00 am to 2:00 pm at the following locations:

April 20, East Lansing Library

May 18, Lansing Library-Auditorium

June 15, Lansing Library-Auditorium

July 20, Lansing Library-Gallery

August 17, Lansing Library-Gallery

See y'all there.

I've called for volunteers here and there, but there is an extremely important job in the club for EVERYONE. That job is RECRUITMENT!!! We really need to expand our membership. We can only grow if you are letting people know about Atari and CHAOS. An organization like ours can only grow or shrink. Which it will do is up to all of you!!

MUSINGS.... by Leo Sell

Anyone else out there ever get lost looking around CompuServe?? I enjoy looking around but it's so big! I pretty much know my way around the Atari SIG (after too many hours) but I haven't explored many of the other CompuServe features. It has been well worth the cost though.

Not much news so here is an interesting listing for you to type in. It is really facinating. Kept me entertained for a long time. Written by John Pellet, I am reprinting it from the January 1985 issue of the DAL-ACE newsletter.

```
10 REM MOIRE & ARTIFACTING
20 REM ON THE ATARI
30 REM
40 REM USE A COLOR TV FOR BEST EFFECT
60 TRAP 275:REM RUN ON ERRORS
70 GRAPHICS 8
80 SETCOLOR 2,0,0
90 COLOR 1
100 DIM A$(1)
110 PLOT 0,0:DRAWTO 0,158
112 DRAWTO 319,158:DRAWTO 319,0
114 DRAWTO 0,0:REM DRAW FRAME
120 POKE 82,7
130 ? :? :? :? "Input step size";
140 INPUT SIZE
150 IF SIZE(<=0 THEN SIZE=0
160 REM DRAWING ROUTINE
170 FOR I=0 TO 319 STEP SIZE
180 PLOT 0,0:DRAWTO 319-I,158
190 PLOT 319,158:DRAWTO I,1
200 NEXT I
210 ? "CLEAR SCREEN?(YES/NO/END);"
220 INPUT A$
230 IF A$="Y" THEN GOTO 275
240 IF A$="E" THEN GOTO 300
250 GOTO 130
275 RUN
300 GRAPHICS 0:POKE 82,0:LIST :END
```

Minutes of the January CHAOS Meeting by Sandy Theisen

We had a very interesting January meeting. A lot of questions were answered regarding what may be happening with Atari. Leo Sell filled us in on some of the items that were introduced at the Winter CES and it sounds as if Atari is off and running.

It was really encouraging to hear about all of the new items coming out and we can all be enthusiastic once again about the Atari line and not wonder if the company is going to be around next year. With all of the plans they have made they should give the competition a run for their money.

CHAOS

Minutes of the January CHAOS Meeting Continued

Leo Sell, our president, had a couple of announcements to make. The first was in regard to getting copies of any of our disks from the library. Now, whenever anyone wants to get a disk from the library they must first fill out a form so it will be easier for the librarian to fill orders and hopefully this will also cut down on some of the confusion at the meetings when any one wishes to purchase a disk.

The other announcement was in regards to a possible magazine and disk subscription to ANALOG for six months. If ANALOG has no objections we will place the disk in our library for anyone to purchase for \$6.00. If this goes over well we may also subscribe to ANTIC Magazine.

Mike Aldrich announced that anyone who may have in their possession, software, hardware, publications, etc., or know of someone who has something (previous members), please fill out one the sheets he handed out and turn it in to him so he can start an inventory list of CHAOS resources. It is important that when the club needs something, there is a central reference point for locating the item. Plus, with the increasing amount of acquired resources and the high turnover of the club, this is a must.

Guy Hurt gave us some information on how to submit articles to different magazine publishers.

Barry Schroeder gave a nice presentation on the CHAOS BBS system and how to use it.

Tentively planned for the February meeting is a printer demonstration, and Leo is going to show us some features of a new software package called HOME-PAK.

FROM THE EDITOR

Hi everyone. I hope you're enjoying the new format. That is, with all the great programs, hardware and software reviews, and technical advice being published in magazines and other newsletters, there is a myriad of information to be passed to you thru this newsletter. I disagree with anyone who says that the newsletter has to be made up entirely from the members of that club. I like to see articles from the members, but if they don't have time one month to do some, then that's just fine (this month happens to one of them). Some clubs almost threaten to revoke your membership if you don't contribute. Well, I don't work that way. I would like to tell you though for those of you who don't know that this newsletter not only is sent to about 40 other clubs across the United States and overseas, but is entered into the Library of Congress. A lot of people read it, I'd say over a thousand. Some people in the club have received free software to review because they wrote a nice review on some company's new product. I know we have talent in our club and even if you think you don't know that much, you might know something that someone out there is just dying

to find out. You say well I'm sure someone has already wrote an article on that! Maybe you're right but you might offer one little thing or different twist to it that will help someone out there understand a little bit better.

Well, I think our CHAOS members have really come thru with some great stuff. And presently we have a member writing reviews or you could almost say documentation for the programs we have in public domain. I'd just like to take a second and thank him, thanks Ralph (Fellows). Eventually we hope to combine these into reference manuals by group (Utilities, Demos, etc...). Of course these reviews might not all be positive, but I think you all know that a lot of the programs in public domain were written by amateurs and therefore lack quality some times.

Well, until now I have not had the time to put any articles in myself, but hope to at least say a few words and maybe fill you in on some of the deals I've run across.

Before I get too far, let me tell you how easy it is to get an article into the newsletter. There are a few easy ways to do it.

1. Upload it to the BBS and leave a note for the Sysop or me and I will download it to my wordprocessor.

2. Print it yourself in a column that is 3 and 1/4 inches or 58 characters wide in condensed print. Just print it in one column, no matter how long it is. I will cut and paste it in to fit where I have space. Give it to me at the meeting or mail it to the P.O. Box # printed on the first page of the CHAOS section of ENERGY. Don't mail it to the address printed on the back of the newsletter.

3. Put your article into any type of data file on a disk and give it to either Leo Sell, Rob Peck, or me and it will be passed to me shortly after.

See, it's pretty simple. Hope to see something from you soon. By the way, it also has to be to me by the 10th of the month to get into the following months newsletter.

As you all probably know, I more or less took over for Ike in the area of not only putting out the newsletter but, trying to get better prices on software and hardware for the members. Of course, I don't turn down non-members

but that's business. I do have a business license and can almost always get you most anything for a lot less than the local stores because I don't have all the overhead they do.

Well let me tell you about the deal I ran across this month. Atari Numeric Keypads (CX85's) for \$49.00. As you know the new ST line has a built in keypad but the regular, XL and XE computers still don't have them. KMART is still asking \$101.00. The keypad was originally designed for the Bookkeeper and Visicalc but will work with most any program. Get yours while the supply lasts. Make sure you check my ad each month for other specials. Well Got to go, getting late, Enjoy!

CHAOS

Getting Serious about M.U.L.E.

by Ralph Fellows

6 -- Mechtrons

(This is one of a series of articles intended to help you sharpen your M.U.L.E.-playing skills.)

The most enjoyable M.U.L.E. game is one with four human players. Sometimes, though, you can't get four humans together. You then have two options: playing against Mechtrons, or the "dead stick" trick.

The dead stick trick works this way. Let's say you have three humans. When the game begins, you plug in all four joysticks and select a character for the fourth stick. But once you land on the planet Irata, no one touches that fourth stick -- the character never participates in land grants, development, or auctions. (You may want one of the human players to run the character into the pub at the start of each development turn, just to speed things up.)

Dead sticks alter the game considerably, and a later article will cover this topic in more detail. Your other option is to let the computer handle the Mechtrons.

Mechtrons, as played by the computer, have very fast "reflexes". If you and a Mechtron are shooting for the same plot during the land grant, the Mechtron will nearly always get it. And Mechtrons are very quick off the starting line during auctions. Furthermore, Mechtrons can accomplish more in a development turn than humans playing as humanoids can -- putting out two mules, prospecting a plot or two, and still getting back to the pub is all in a turn's work for a Mechtron.

Still, experienced humans generally do better than computer-controlled Mechtrons. It's not because humans can catch wampuses -- wampuses are not really very important. Instead, it's because humans are smarter than Mechtrons (or at least they should be).

Mechtron stupidity shows itself in many ways. If a Mechtron has a surplus of food or energy and the store is offering a good price, the Mechtron sells. Even when hanging on to the surplus would cripple the other players, the Mechtron sells.

Mechtrons aren't willing to pay really high prices for land. Sure, they start out with more money than humanoids; but that advantage dissipates in two or three turns. You can nearly always outbid a Mechtron if you try. (See an earlier article to find out how much you should bid for land.)

Mechtrons mis-plant mules, generally favoring mines over food and energy.

What it comes down to is that Mechtrons just aren't very good at long-range planning. They can't see more than one turn ahead. Where a human player would be gradually converting his plots to crystite production, a Mechtron often adds another couple of smithore mines. The Mechtron's strategy pays off for that turn, but the

human comes out ahead in the long run.

How, then, should you play when there are Mechtrons in the game?

To begin with, don't let their speed and initial cash advantage get you down. With proper play, you'll beat them.

Don't worry so much about smithore as you would in an all-human game. The Mechtrons love to mine for smithore, and they're usually willing to sell any time the store offers more than \$50 per unit. There's rarely a mule shortage in a game with Mechtrons.

Make especially sure you produce enough food and energy to meet your own needs. The Mechtrons may be willing to sell to you when they have a surplus, but they're usually so busy mining that they don't have a surplus of food or energy. In fact, you can often make a nice profit by producing a little extra food and/or energy and selling it to a Mechtron.

But be ruthless. If a Mechtron decides to rip out all his farms and energy collectors, don't let him get buy cheap. If you have a surplus, make sure he pays plenty for it. If you don't have a surplus (or, sometimes, even if you do), try to buy the store out ahead of him.

Keep your eyes open while the Mechtron prospects for crystite. Then, during the land grant, shoot for the good crystite sites. But make sure you have several possible plots to shoot for; the Mechtrons may grab your first choice or choices, and you can't afford to panic and maybe end up with no new plot at all. Plan ahead, choosing your targets whenever you can see the map on the previous turn.

Above all, don't get discouraged when the computer sends a starving Mechtron a package from home. Mechtrons never learn. In another turn or so, the Mechtron will be out of food or energy again.



GIVE A BIT!!!

**Don't let the Newsletter crash!
Contribute an article this month.**

If YOU don't do it, NO ONE will!!!!

CHAOS

OPINIONS of Adventure Master Continued from Last Month by Ralph Fellows

All in all, this is a well-engineered product. Although it doesn't allow you to do all the tricks you could manage in a hand-coded game, it makes the bread-and-butter stuff -- moving around, taking and dropping objects -- easy and fast.

That's not to say the product is perfect. For one thing, I couldn't get the pictures to display properly from a self-contained disk. Drawings that looked great in the development system turned into meaningless garbage.

There is no way to invent an object that the player can simply pick up -- each object has to be guarded by its own special phrase.

There is no way to delete an object, room, or picture. Once you assign a picture to a room, you can't change your mind; you can change the picture, but you can't make it go away.

The command parser is extremely limited. There is no way, for example, to make GET a synonym for TAKE.

Still, I'm not disappointed. ADVENTURE MASTER is easy to use, although it takes a while to get used to. If you enjoy creating adventure games, you ought to take a look at it.

No Mo Co Le Co?
by Greg Barr

In case you were wondering why a major swimming pool manufacturer was giving \$500.00 scholarships to people who bought their \$450.00 Adam computer, don't worry. Coleco announced the first week in January (AFTER the Christmas sales reports were in) that they were "abandoning" their machine. (Coleco's stock went up \$2.25 the next day.) Coleco sold their remaining inventory, reportedly to Revco's Odd Lot unit--perhaps as many as 200,000 machines. Rumor has it that Toys-R-Us will soon be selling the ADAM in the \$250-300 range. If you bought an ADAM for the scholarship, don't worry, Coleco is selling more than enough Cabbage Patch dolls to make good on the outstanding scholarships. (Coleco expects to sell more than 1/2 Billion dollars worth in 1984 alone.)

In a related development, Coleco discreetly showed off an Apple IIc and IIe compatible computer they have had under development for the last couple of years. Supposed to cost around \$500 and include a modem. Coleco is 95% complete on this machine, and is trying to find someone to license the technology from them. Sounds like it could be a good thing for the boys upstairs at ATARI to consider, IF it is compatible without violating any Apple copyrights. (ROM compatibility is comparable to having the extensive index (about every fifth word has an entry) from a medium sized short story and creating a totally different short story that uses the same index.) Remember those far-Eastern sorts have been turning out Apple and IBM compatibles in the \$200 range for years, until the courts or cops find them.

By now you are probably asking how all of this affects Atari...good question, here's my two cents worth. I believe that the buying public has been pretty well "sold over" for the current generation of home computer products. People are far more knowledgeable now than a few short (maybe 2?) years ago, and are now looking for Hardware/software that really does something, probably in the just under \$1000 range (note that both Atari and Commodore are soon to be out with considerably enhanced machines in the \$500-800 range) that can still play games, but also does a competent job word-processing and doing the taxes. Note that Apple and IBM sales are way up this Christmas, while Commodores are down. (Atari you really can't count because their baseline was so low, though they are way way up and outselling Commodore with the new \$119 price.)

By the way, the hottest selling Atari packages right now are Atariwriter and Synfile+.

Beginner Recommendations Opined for discussion by Greg Barr

The title is not a misprint, it reads as in opinion, mine. While I am not the great-granddaddy of Atari users, I did buy my machine back when they were still \$1080 for a 16K 800. I have been involved with home computers since 1977 and after a few years of use I have some strongly held opinions about what kind of hardware and software are needed to make up a competent computer system. I am offering only my own opinions here, based on what is currently available on the open market. I hope that some of you "old-timers" out there will write me with your opinions, perhaps we can get a few columns out of what you REALLY need.

Let's assume that you are brand-new to the wonderful world of Atari. Perhaps you just got a system for Christmas.

1) You NEED 64K to do anything "useful". A 16K machine is good for a lot, especially cartridge games, but has substantial memory limitations. If you have a 600XL, hold on to it for games, but upgrade real soon now to an 800XL. Around our house we have 16K computers attached to almost all the T.V.s. Cartridge software is so portable, and you never know when you might want to try out a quick subroutine.

2) Next you NEED at least one disk drive (two preferred). Atari tape drives are O.K., but SLOW SLOW SLOW and, like most tape drives, Unreliable. Most good software is available only on disk, and besides, we have this incredible club library. At \$200 or less Atari disk drives are quite competent, but you should consider converting to double density with an add-in ROM upgrade (about \$70)

3) Buy a good 9-13" color TV or monitor (with sound) like the Commodore 1702. If you intend to do much programming, your eyes, and the rest of the family, will thank you.

CHAOS

4) Buy a printer. The 1027 costs about \$275 these days for letter quality, the 1025 is around \$219 for competent dot matrix. You can spend more on a printer, but really don't need to unless you have a special purpose in mind. Remember, most non-Atari printers require an interface which adds to the cost.

5) Consider buying a modem so you can get in touch with our bulletin board and with your friends. While not at all necessary, a modem does make your computer about 100 times as useful, if you use it. **WARNING:** the Atari 1030 modem uses a different driver (the T: device, which does not come standard and you will have to find for yourself) and will not work with a lot of the modem software out there (most of which uses the more common, Atari supplied R: device). This is one reason why it is so inexpensive. A modem and its required interface costs around \$100.

6) Definately get your computer its' own desk and work area. In our house I have taken over one wall of the dining room with desk and shelving. Unless you can keep your computer system organized you will find yourself using it less and less.

7) Buy a surge suppressor. Plug in the wall 6E "Voltage Surge Suppressor with Line Noise Filter" at Meijer's cost me \$18. It will afford you considerable protection against lightning, power glitches, and refrigerator motors. I was using one on my T.V. during the recent ice storm/power outages and it absorbed several (perhaps 15-20) incredible surges as Main lines were switched by the power company, with no damage to the T.V.

8) Subscribe to several magazines. A.N.A.L.O.G., Antic, and Rom are relatively Atari specific, Compute is perhaps the best Apple/Atari/Commodore mag. Check out our club library for some back issues.

9) Speaking of the club, You ARE a member aren't you??? We represent perhaps the best pool of talent and knowledge about the Atari in the mid-Michigan area. And our opinions are free. If you aren't a member, STOP READING RIGHT NOW and send your name, address and phone, along with \$12 to CHAOS, Box 16132, Lansing, MI 48901. At least stop in at our next meeting. Details are usually on page 3.

Enough about the hardware. Now for some general/specific software recommendations. Since each of you has different needs, please remember that these are my opinions. I personally prefer any software on ROM cartridge. Disk drives have a terrible habit of eating only copies of a disk. I am also most in favor of non-copy-protected software, barring that, allowing any reasonable number of backup copies to registered holders for a small (\$10) charge.

1) Any game by Infocom, especially Zork 1, Witness, Hitchiker's Guide to the Galaxy. (apx \$30 ea.) Note: if you send in your registration card you receive free the New York Times, one of the wittier bi-monthly promotional pieces I have ever encountered.

2) Any game by Electronic Arts, especially Pinball Construction Set, Mule, Archon, Murder on the Zinderneuf, and Seven Cities of Gold. Note: for the last two years EA has run a buy two, get one free promotion in December. (apx \$30 ea.)

3) SynFile+, SynCalc, SynTrend. I have only used SynFile+, but the reviewers are going nuts over SynCalc (a better visicalc) (apx \$45 ea.) Probably the best database, spreadsheet, graphics software available for the Atari. Note: Controlling interest in Synapse was recently sold to Broderbund Software.

4) Anything by OSS, especially Basic XL. Far superior to Atari Basic, and if you are doing any programming at all, more than worth the cost. (apx \$30-100)

5) For word processing, Atari's Atariwriter or The Writer's Tool by OSS. Note: Batteries Included has a fascinating package for \$50: Hometext, Homefind, and Hometerm. Written in OSS Action! they seem to be getting great reviews.

6) Star Raiders, you MUST have Star Raiders. This was one of the first games for the Atari, and is still one of the best.

7) Others: Any of the arcade games can be fun, but first check the club library. example: Myriapede is far better than Centipede, and costs less.

8) The Entire CHAOS library: jam-packed with more than you can review or play in a lifetime, yet it costs about a buck a disk on your disk.

Now that you have some hardware and software, you are going to want to figure out what to do with it.

1) JOIN OUR CLUB!

2) Buy some books, especially YOUR ATARI COMPUTER, by Poole et al, Osborne/McGraw-Hill.

3) More books: Compute's First, Second, and Third books of Atari, and Mapping the Atari by Compute! books.

4) Remember to subscribe to several magazines.

CHAOS BBS
by Barry Schroeder

Where do you get the latest on ATARI? The CHAOS BBS is where. Where do you get the latest downloads? The CHAOS BBS! These are just a couple of things you get when you call the CHAOS BBS at 627-4243. I know alot of you have a modem and don't call. The BBS has 3 double density drives on line.

Also the BBS has general and private mail. So all of you who never get mail via the old fashion way get on and leave a message to someone and see how much fun getting mail on a bulletin board is. Read someone else's mail which is even more fun to some folks.

You have an article for the newsletter? Then upload it to the BBS and the editor can download it. No more missing the deadline. Give it a call! you won't be disappointed.

CHAOS

ONE-LINERS
by Greg Barr
PO Box 1343
East Lansing, MI 48823

CHAOS LIBRARY DISK UB

Reviewer: Ralph Fellows

Still a roaring silence at my mailbox, so this month I have to get creative. Please Write!!! Send any tips or creative programs that demonstrate the power of the Atari, preferably in 100 keystrokes or less.

Because of the incredibly powerful, yet easy-to-access Operating system that comes with the Atari there are some simple programs that can be verrrry powerrrrful. My favorite reviewer, Rob Peck, has a weakness for word-processors. Most people don't know how easily they can turn their Atari into one.

```
0 Rem :ONELINER WORD PROCESSOR
10 POKE 838,166:POKE 839,238:POKE 82,0:SETCOLOR
2,1,0:SETCOLOR 4,8,2:OPEN #1,12,0,"E:"
20 GET #1,A: ? CHR$(A)::GOTO 20
```

Notes:

You can use linenumber 0 in Atari Basic. I try to use it for program name, copyright notice, etc.

LINE 10: POKE 838,166 and POKE 839,238 redirect normal screen output to the printer by changing the I/O Control Block. POKE 82,0 gives you a 40 column display. (The SETCOLOR instructions give my preferred-for-long-use character, background and border colors.) Then you open Channel #1 for screen input and output to through the Editor Device.

Line 20: Get a character from the Editor, print it to the screen, and do it again, forever. Simple, BUT...because you poked the I/O Control Block, instead of printing to the screen your Atari tries to send the character to the Printer...BUT...the Editor Device sends your character to the screen anyway so you can see it...ALSO...the Atari operating system lets nothing happen until you press RETURN...SO...Print a logical line whenever you press RETURN, but not before. Until then, put characters on the screen, insert, delete, move them around to your heart's content.

This "text editor" lets you create and print a screen of text the way you want it. As long as you use the control-arrow keys for cursor moves nothing is printed. To print, move the cursor to the top of the screen and hold the RETURN key down. The cursor moves to the bottom of the screen, printing as it goes.

This "word-processor" is not very exotic, but it is simple and it works. It's not at all user-friendly, but:

"The real-world is not user-friendly" (Kelvin Throop)

Greg.

This is a set of utilities and games, many from the Atari Users' Group of Dallas.

XREF:=(No extension.) Program that reads tokenized Basic programs and counts variables and references. Do the initials "LW" mean what I think they mean? Program needs a printer to run.

MARK1.BAS:=Diagonal intersecting lines that change color.

TRENCH.BAS:=Trench warfare in the Star Wars sense.

RICOCHET.BAS:=Try to find five dots hidden in an 8x8 box. Scrolling problems make this game unplayable.

SCRL19.A01 and SCRL19.M01:=The M01 part is binary-loadable, but I have no idea how to get it to run -- much less what it's supposed to do. Maybe AUG of Dallas could tell us. Anyone want to call them? (I suspect the A01 file needs the Assembler/Editor cartridge.)

DATABASE.BAS:=Lets you build database as big as your Atari's memory -- not disk drive -- will hold.

SCOLOR1.BAS:=Lets you use paddles to change the hue and brightness of the screen.

PLAYMISS.BAS:=Lets you move a player with your joystick.

BYTE1.BAS and BYTE2.BAS:=Logos of BYTE magazine.

POKEDMO.BAS:=Demonstrates some graphics techniques not covered in the manuals. Various parts of a text screen appear and disappear.

ANGLECAN.BAS:=You move a horizontally, firing it when the angle is right at a group randomly-placed targets.

ANIMATON.BAS:=Program draws a line segment, then another nearby, and so on. The oldest line segments get erased as new ones are drawn.

```
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*****
```


CoCo NOTES

By Terry Feichtenbiner
CCUG President

Our February meeting featured the election of officers for the Color Computer Users Group. The new/recycled slate is as follows:

President> Terry Feichtenbiner 371-1594
VP/Program> Randy King
Treasurer> Craig Hahn 372-1764
Publicist> Sandi Milbourne 351-6927
Librarian> Randy King

Users Group officers need support from all the members. Suggest your ideas or volunteer to help in any area that interests you.

The next couple of Users Group meetings are on March 2 and April 6. We meet, as usual, in the East Lansing Public Library at 1:00 PM on both dates. When in doubt about a meeting date, call the Library, they keep a record of our reservations. Guests are always welcome at our meetings.

Book Review FIRE IN THE VALLEY

Paul Freiberger
Michael Swaine

The FIRE IN THE VALLEY refers to the speed with which microcomputer technology became the life-force in California's Silicon Valley. This large format softcover book provides a history of the microcomputer hardware and software industry from the first Altair to the current IBM PC and Macintosh machines.

The book uses background information to introduce each of the turning points or innovations in chronological order. Thoughts and reactions (mostly first-hand) of the people involved are used to keep the book interesting beyond reporting product announcements and technical wonders.

FIRE IN THE VALLEY is well written and it is paced as fast as the technology boom it documents. This is not an reference book. Facts are sometimes secondary to communicating the feeling of the times. Occasionally the authors repeat themselves from one chapter to another, and there is no serious attempt to determine who actually built the first microcomputer. Overlooking these minor problems, FIRE IN THE VALLEY is a success story of a few American individuals who let their enthusiasm lead them where corporate giants would not go.

If names like Bill Gates, Adam Osborne, Steve Jobs, Steve Wosniak, Rob Barnaby, Microsoft, MITS and Charles Tandy are familiar, you will enjoy reading about the industry they founded. If they are not familiar, the book will be a long over-due education as well as a good read.

Reviewed by Terry Feichtenbiner

SOFTWARE FOR THE CGP-115

By John Evans

If you prefer ready made programs for your CGP-115 printer rather than writing the programs yourself, there are several sources to consider. I'll write an overview for readers unfamiliar with the software available.

All-American Ultralight Ind. of Ventura, California (1144 Kingston 93001) has a machine language program to print pictures from PMODE 3 graphics and a BASIC program to print banners.

Derby City Software of Louisville, Kentucky (3141 Doreen Way 40220) has a color dump machine language program and a biorhythm program in BASIC.

Rainbow and Hot CoCo magazines published several programs with the supporting text. They are:

- * January 1984 issue of Rainbow...page 120, a graphics doodler program by Thomas Szlucha.
- * May 1984 issue of Rainbow...page 135, a label program and page 137, a GP dump program both by Thomas Szlucha.
- * December 1983 issue of Hot CoCo...page 134 (with program listing #3 for the CGP-115), for polar graphs by Delmar Searls.
- * February 1984 issue of Hot CoCo...page 131 (program listing #3), for graphs on grids by Delmar Searls.
- * April 1984 issue of Hot CoCo...page 132 (listing #2), a two dimensional objects drawing program by Delmar Searls.

So, there is a variety of useful programs out for you to use with your CGP-115 and CoCo.

M3G

DAYTON HAMFEST COMING

by Lee A. Hodges

I have had it with ice and snow. It is now time to turn my thoughts to the early spring -- really the weekend of April 20th and the annual trek to the Dayton Hamfest. A co-worker and I made the journey last year and had a great time.

I happened to be at the book store last week and looking in the ham magazines found the announcement of this years Dayton event. It will be April 19th thru 21st. I had planned to go again this year and mentioned the fact at the M3G Exec meeting and everyone at the table wanted to go too. Joe Werner thought that we should get an announcement in Energy to find out who else might like to go with us. If you are interested in going or would like more information you can call me (Lee Hodges) at 669-3258 or Frank Dolinar at 351-1899. Frank has agreed to help set up car pools, so if you would like to drive or would like to ride with someone else let us know.

The drive to Dayton is about 4 hours, so the trip can be a made in one day. We try to leave with the idea of arriving at the hamfest by 9:30 or 10. On Saturday the hamfest lasts till 6 in the evening, so this leaves plenty of time to get some feet. Hint: plan on doing a lot of walking. Last year the amount of computer goodies (wives can read this as junk) was something to behold and I am looking forward to the trip this year.

Osborne Special Interest Group

by Larry Tirone

Now all the mailing is done. All I can think of is "I sure hope the club will respond". If you haven't received your mailing, feel free to call and I'll send one out to you.

I've talked with Greg Martin, CP/M SIG President, about the possibility of OSIG joining CP/M SIG. Greg felt that the OSIG members could contribute a lot of much needed variety to his club. It is a opinion that we could join the club with very little trouble as far as memberships are concerned. If you are concerned that by joining the CP/M SIG, we will loss sight of our computers then pull out your master diskettes and read what is on them. That's right 'CP/M tm V2.2 SYSTEM & UTILITY'. The key is CP/M, just like CP/M SIG. All of the software that runs on an Osborne should run on any other computer that can run CP/M V2.2 compatible programs.

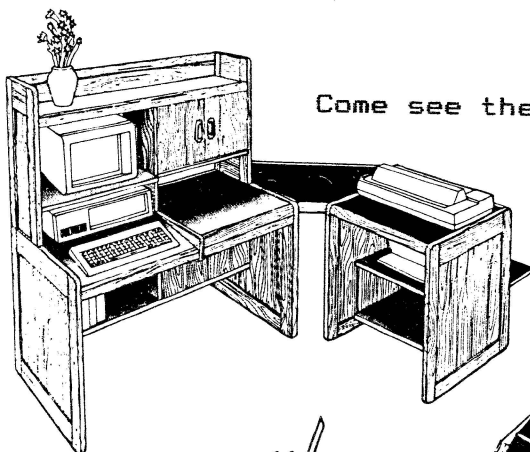
That's the news up to now. I hope all is going well for you.

[Larry Tirone can be contacted at 484-3921.]

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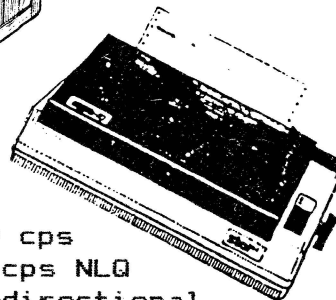
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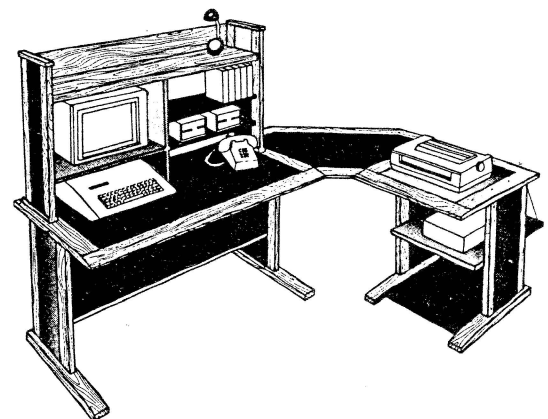


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VIEW FROM THE SIDE by Warren E. Wolfe President, M3G

For those of you who are interested in the accuracy of various predictions, Dave Chun makes dire predictions that come true. The latest of these was seen last month in this very column. Dave predicted that I was soon to be the president of M3G.... Check the by-line above. Dave has given me the responsibility to write this column, and that seems to be a good test for abdication. My thanks (and the assumed thanks of the rest of the club) go out to Dave for a job well done. I plan to have an exciting presidency, in the tradition of another "assumptive" president, Gerald Ford.

The March meeting of M3G will feature a talk on Artificial Intelligence by Frank Dolinar and Greg Martin. It promises to be stimulating. Frank and Greg have distinguished histories as speakers at M3G meetings. Additionally, it may be necessary to elect a new vice-president to fill the vacancy. Such excitement!

The last several years of my life have been involved, for better or worse, in the purchase of IBM PC equipment. The purchases have been mostly for other people, but recently I bought an IBM PC-AT for myself. It was a very enlightening experience; there is great value in applying one's own advice when one's own cash is on the line. I learned some interesting facts about the computer retail market, and I would like to take this opportunity to share them.

At the time I purchased the AT, the machines were in short supply. I had resigned myself to paying list price for the beast, although I usually break out in hives when I hear the word "retail" mentioned in polite company. I justified this to myself as a decent method of "getting the jump" on my theoretical competition in the consultancy jungle. If a person can't lie to himself.... One of my clients was forced to display a sign above the computer he had purchased. It read: "You can tell the men from the boys by the price of their toys". It might be partially appropriate in my case.

At any rate, I was prepared to pay list price for the AT. I also wanted the Enhanced Graphics Adapter (EGA), also a new device that was in relatively short supply. My first attempt to purchase the computer was with Entre in Frandor. I got intelligent help from Mike Harridan (sp?) who identified me as knowledgeable customer and offered assistance only when it was desired. This is unusual. When I finally had the resources to make the purchase, I went in to "talk deal." We discussed the AT and EGA, and the other impedimenta needed to get a working system. The latter included an Amdek monitor, PC-DOS 3.0, a printer cable, and the loan of a monochrome adapter card to replace the EGA, which was unavailable from Entre at that time.

As it turned out, there was precious little deal to discuss. I would pay list price, for everything, and that was that. I was informed that that price included complete installation and some few days of training on the PC-DOS operating system, and the computer itself. Additionally, at no extra cost, a box of diskettes was included. I was stunned. Not only do I have no use for instal-

lation and training, I wanted to set it up myself, and would feel cheated if it were done for me. I told Mike so, and offered that to him as a method of reducing the price of the non-critical components of the system. All I accomplished was to remove the training and installation from my system; the price did not come down. The box of diskettes was still included in the \$5,000.00 price tag at no additional charge. Whoopie!

After determining that they really meant what I thought I had heard, I told Mike that I would buy everything but the AT and EGA by mail-order. I was then informed that Entre would not sell me a computer under those conditions. Blood rushed to my feet, and I nearly passed out. The thought of a retailer passing up a sale at list price shocked me beyond words. With all of my blood in my feet, I suppose I may be excused for the lapse of judgement which followed. I agreed to buy the whole thing at (shudder) list price.

Mike left the cubicle to confirm the sale with the manager. The soundproofing in Entre leaves something to be desired, as I overheard their discussion. The manager told Mike to tell me that they would let me know in about a week when they would be able to deliver the PC-AT. He said that Mike should make the sale and take my money, but that they would try to sell the AT that was in-house to someone who was going to buy a complete system, including a printer, and a boat-load of software, thus making more money on the sale. Mike returned and told me most of the above (filtered for customer consumption). I feel that it is much to Mike's credit that he seemed embarrassed to pass along the tale.

I asked Mike to confirm my impression: Entre would take my money for the machine they had, but would keep the machine for a week to see if they could find a bigger sucker, and that there was no guarantee that I would receive the machine, even after the week's delay; I would merely be told when they would try to deliver it at that time. For this wonderful deal, I would get to pay straight list price for all the equipment, and would also not get the installation and training that any other customer would get as a matter of course. I also mentioned the box of diskettes. At that time I remembered a line from a Garfield cartoon, and paraphrased it thus: "I don't mind you trying to rip me off nearly as much as the credit you give my intelligence." I ripped up the contract, and left the store.

I then went to ComputerLand, where I talked to Steve Almquist, the sales manager. Steve had the equipment I needed, and additionally gave me a break on the price of everything except the AT and the EGA. Steve even arranged for me to buy a monochrome monitor on approval (I eventually returned it and bought an Amdek... I'm fussy). I got the type of service I expect when paying thousands of dollars for equipment. The folks at ComputerLand have been helpful several times since, allowing me to use their AT for file transfers, etc. I recommend the Okemos ComputerLand to anyone interested in the retail end of computer purchases.

H/Z SIG NEWS

by Bill Goodwin

So far, the D.E.L. emulator board has not been seen. Some rumors have either been disposed of or are now considered fact. The rumor that Zenith will have an exclusive and will raise the price to \$600 is NOT true. The need for another operating system to operate in IBM mode is true. But it doesn't require a Z-150 version. The IBM version of ms-dos will work just fine. (Shouldn't be too hard to borrow a bootable disk from one of your IBM friends!!!) This gives me a much better chance that Concurrent dos will also operate. (AND Sidekick!!)

But nothing has yet been seen of the board itself. In early Feb. I learned at a Heath store that Heath in St. Joe had not yet recieved thier test sample. They were hoping to start delivering boards in another month (early-March). This is being written in mid-February so I don't know if that happened or not. (This is also being written rather slowly because I'm trying to do this while watching Father Goose on WGN!!) There also seems to be a growing pessimism on the HUG bulletin board concerning the non-arrival of this board. I'm still confident. (or maybe I don't really understand the situation!)

There is a long term chance of obtaining PC compatability. There are two parts to this one. First, Digital Research has announced Concurrent DOS for the 80286. This will intercept the PC-DOS interrupts and provide appropriate data to device drivers that operate the machine it is running on. Unlike the version of concurrent out now it will handle the DOS 2.xx calls. What's that? You say the -100 has an 8088 and not an 80286? Therefore it won't work? That's where part two comes in. Several weeks ago the HUG bbs had a guest wandering around. It was someone from Macrotech who was looking for interest in and ideas for a 286 mod for the -100. He was getting many ideas on the board and people like Software Wizardry asked him to check directly with them because they had so many things to offer. While there was, as expected, talk of an S-100 card there was also much talk about a new motherboard. This could provide not only the 286 but other little goodies such as 280 for 8-bit, large quantities of memory, and even PC emulator circuitry. Eight MHZ and the 287 math chip were also mentioned. I wonder if they could build in a hard-disk controller? I've seen hard disks (without controllers) selling at low prices. Quite a bit of interest was shown in this project. If it actually becomes available and is priced to be affordable it should be a big seller.

The February meeting went on in spite of the bad weather. Only a handful showed up but we swapped a few lies and then adjourned to watch either basketball or St. Elsewhere on the tube. The March meeting will be at the church on wednesday, March 13th.

The February issue (the 100th issue) of Dr. Dobb's Journal arrived recently. A collection of short pieces contained one by Tom Pittman. Surely you remember Pittman Tiny Basic? For \$5 you received a manual and a paper tape. A paper tape? Yes, what else would you use with your 4K ALTAIR or INSAI and your ASR-33 terminal? He talks about hackers. (The real ones, not the kids with modems.) The interesting thing is what he says about the Macintosh and UNIX.

According to him, the Mac is now THE machine for hackers. At the Hacker's Conference last year the majority of those attending were Mac users; none would admit to using an IBM. Apparently one of the reasons for this is the lack of information on what is in the Mac. They don't like being told "you can't do that". He also mentioned how great he considers UNIX to be. He doesn't say it, but obviously would like to have UNIX on the Mac. He makes a reference to cost as the reason he has a Mac but not UNIX. This may change.

Next month a new column called "Realizable Fantasies" will start in Dr. Dobb's. The first item it will consider is a public domain version of UNIX called GNU. (If you would like more info before the next issue comes out, you will find a file named GNU.TXT on DL4 of the Computer Language Magazine bulletin board on Compuserve. (go CLM-332) In this file the author states that the first processors to get GNU will be the Motorola 68K and the National 32000 series. It seems reasonable that if the 68K is being considered then the Mac has to be a prime candidate. Mr. Pittman may yet get a UNIX on his Mac.

In April the new Atari is supposed to be shipped. The prices are quite attractive. It is also a 68K machine. It uses Digital Researches GEM for its graphics. If GNU is made available for the Mac then there should be no problem with getting a version for the Atari. If GEM will work with GNU and GEM can be made to work with GNU on the Mac the two machines should then be quite software compatible. If such a thing happens then \$1000-1200 will provide a 512K machine with hard-disk, color graphics, and UNIX. If you thought that the hacker-heaven called CP/M produced a lot of Public Domain software, you ain't seen nothin' yet!!!

THE USER
by Joe Werner

NEW INTEGRAL FROM HP

HP has done it again -- come out with an exciting new machine, that is. And their local outlet, Demco, has done it again -- offered me a chance to get my hands on one, that is.

Regular readers of this column know that I'm a techno-junkie, with a love for getting ahold of the newest computer 'toys'. I can't possibly afford to buy all of the equipment I'd like to, so the offer of a chance to evaluate something without having to buy it is extremely attractive to me. (I can resist anything except temptation.)

At any rate, the new HP Integral Personal Computer is noteworthy. And I've actually seen one and played with one enough to be able to share some first impressions. My comments are based on one evening's encounter with the Integral. I hope to get a chance to get acquainted better with the Integral, and will probably have more to share with you in future columns.

Let's start by reviewing the spec sheet. The HP Integral is a 25 pound portable, measuring 17.5 cm deep by 32.5 cm high by 40 cm wide (7" by 13" by 16"). It contains an 8 MHz 68000 processor, with 512K bytes of RAM, expandable to 1.5M bytes internally, or 5.5M bytes using the optional Bus Expander. (Some of this RAM can be partitioned into a RAM disk.) Also included is 256K bytes of Read-Only Memory, which contains HP-UX/RQ operating system (a single-user version of Unixtm), HP's Personal Application Manager (PAM), and HP Windows. (More about this software later). The unit also contains one 3.5 inch 710K byte diskette drive. (Optional add-ons range from another 3.5 inch diskette to a 55M byte Winchester hard disk with integral tape backup.) A 90 Key full travel keyboard is included, as is a 9 inch electroluminescent flat display, capable of showing 24 lines of 80 columns, or 255 by 512 pixels of bit-mapped graphics. On top of the machine is a built-in ThinkJet printer. An HPiB interface is built in, and two more I/O slots are provided, for such options as an RS-232 interface or a built-in 300/1200 bps modem. An optional mouse is available. Languages currently available are C and HP Technical BASIC, each of which is an optional extra. A number of application programs are or will be available for purchase.

Those specifications impressed me when I first read them. What impressed me most was that they had crammed so much hardware into such a small space, made it portable, and put the Unix operating system on it. But Unix is a difficult operating system for many users to adapt to, and I was curious as to how

HP would address that. I've seen and written about HP's answer on the Portable PC, where PAM runs on top of MS-DOS, making it possible for users to use the machine without ever learning MS-DOS commands. I was fairly certain that HP would do such a thing with PAM on the Integral, and I wasn't disappointed.

The first thing to do with any new machine is, of course, to set it up. With the Integral, this is relatively simple once someone shows you. The top hinges back to reveal the printer. The keyboard swings down from the face of the machine and detaches, revealing the display and diskette drive. The mouse can be found hiding in a compartment under the printer cover. The power cord, diskettes, and printer paper can be carried in the optional cover, which really ought not be optional, since it gives the user such a convenient place to store all the accessories. The power cord plugs in the back. The keyboard and mouse plug into identical-looking plugs on the face of the machine. These plugs look something like wide modular telephone jacks, and while there is no marking on the machine indicating which goes where, it does make a difference. (Hint - the keyboard goes in the left jack.)

With all that resolved, I powered the machine up, and found my first pleasant surprise -- the display. Any of you who have looked at the modern portable computers which use Liquid Crystal Displays (LCDs) have noted difficulties with contrast and glare. While the LCD displays are useable, the quality of the display is dependent upon the surrounding lighting.

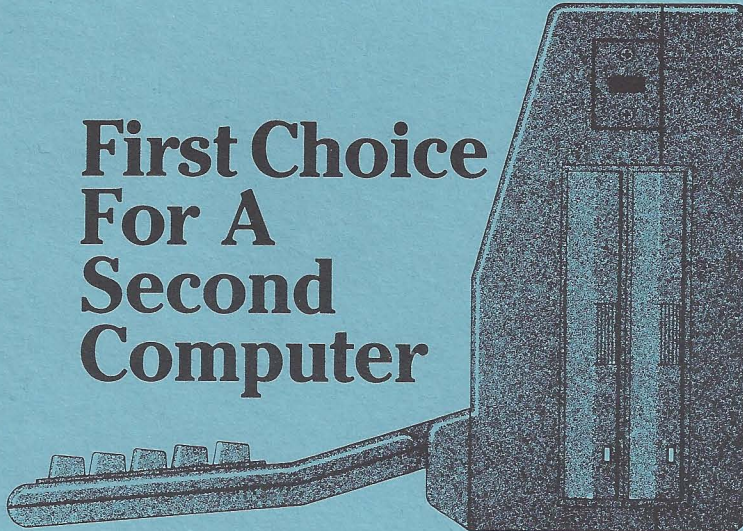
An electroluminescent display is not an LCD display. It is flat as an LCD, but gives off light, rather than reflect light as an LCD does. The display on the Integral is amber, and quite crisp and readable. The intensity (brightness) is not adjustable, but the viewing angle can be varied by a built-in adjustment over about a 20 degree angle, making it quite adaptable to the user.

When the machine powers up, the user finds himself in PAM, the HP menu system. This PAM appears as a window on the screen, asking you what you want to do. When you insert a diskette in the drive, the file system is automatically mounted by PAM, and the user has the option to view any data file or execute any program on that diskette. You can use the mouse to specify this, or use the cursor keys and function keys on the keyboard. (The mouse is completely optional.)

When the user selects a program and specifies to run it, or when the user asks to view a file, a task is created under Unix, and a window is opened on the screen. This window can be as large as the screen, or as small as a couple of partial lines. The windows can be sized, moved, hidden, and

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